

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of: **Hiroshi NAKATANI**

Art Unit: **1795**

Application Number: **10/570,151**

Examiner: **Peter L. Vajda**

Filed: **March 1, 2006**

Confirmation Number: **8047**

For: **TONER**

Attorney Docket Number: **071850**

Customer Number: **38834**

**DECLARATION UNDER 37 C.F.R. §1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Hiroshi Nakatani, a citizen of Japan, hereby declare and state the following:

1. I graduated from Tokyo Institute of Technology University of Yokohama, Kanagawa, Japan in 2000 with a Master of Engineering degree in Environmental Chemistry and Engineering.

2. Since 2000, I have been employed by ZEON CORPORATION of Kawasaki, Kanagawa, Japan. During my employment therein, I have conducted research and development of toner.

3. I am the author of the following publications:

US Patent Application No.593396/10

JP Patent No.4337548 (WO03/065125)

4. I have read and am familiar with the above-identified patent application as well as the Official Action dated August 18, 2009, in the application.

5. I consider myself to be skilled in the art of the above-identified patent application.

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6. A skilled artisan readily ascertains that the silica fine particle set forth in claim 1 as filed in the June 22, 2009 Amendment is nonconductive for the following reasons:

(A). The skilled artisan knows that the term silica generally refers to silicon oxides ( $\text{SiO}_2$ ).

(B). It is well known in the art that silica is inherently nonconductive. As evidenced by the enclosed reference, the resistivity of silica fine particles is  $1 \times 10^{13} \Omega \text{m}$  ( $= 1 \times 10^{15} \Omega \text{cm}$ ). Therefore, by definition silica must have the characteristic and property of being nonconductive.

(C). The silica fine particle as set forth in claim 1, namely a silica fine particle having a  $\text{Dv50/Dv10}$  of 2 or more, in which  $\text{Dv10}$  represents a particle diameter at which a volume cumulative total from small particle diameter side is 10% and  $\text{Dv50}$  represents a particle diameter at which the mentioned volume cumulative total is 50%, a volume average particle diameter in the range from 0.1 to  $1.0 \mu\text{m}$ , a sphericity in the range from 1 to 1.3, is described in the specification of the current application at page 7, line 20 to page 10, line 21 and elsewhere throughout the specification.

(D). A skilled artisan reviewing the above noted section in the specification, in view of the entire application, readily ascertains that the silica particle as set forth in claim 1 is a silica fine particle having the inherently nonconductive resistivity known in the art.

(E). One reason a skilled artisan would readily ascertain that the claimed silica fine particle is the inherently nonconductive silica well known in the art is that the claimed

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silica fine particle is contrasted in the specification to a second silica fine particle (B) described at page 10, line 22 to page 11, line 27 and a conductive inorganic fine particle (C) at page 12, line 1 to page 14, line 11. As set forth therein, the conductivity (low resistivity) of the conductive inorganic fine particle is given specific attention as the resistive properties affect on the toner. A skilled artisan contrasting this description of the conductive inorganic fine particle (C) to the silica fine particle (A) readily ascertains that the silica fine particle (A) is the silica known in the art to be nonconductive (high resistivity).

7. Therefore, as one of skill in the art, I do hereby affirm that the silica fine particle (A) as set forth in the above-identified application and the claims thereof submitted on June 22, 2009, is understood within the art to be "nonconductive" silica; nonconductivity being a known inherent property which is not new matter to the application as originally filed.

The undersigned declares that all statements made herein of his own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Hiroshi Nakatani

Signed this Fri day of 10.30, 2009.